PIANC Bulletin

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President's Message *by Major General Don T. Riley, President, U.S. Section, and Director of Civil Works, U.S. Army Corps of Engineers*

Dear Members,

Since the founding of PIANC, the organization has provided many benefits to the Nation. A major benefit is the new and lasting relationships we build within the U.S. and with other nations for the advancement of navigation.

Within the U.S. Section. Domestically, the value of PIANC can be found in the bonds fostered among the U.S. Section membership. Through members' interactions at PIANC events, we teach and learn from each other on the spectrum of water resources challenges each of us face across the country, as well as the ways we currently address those needs. With the involvement of top governmental and industry leaders at these events, the messages are taken to our Capital directly, where they have great influence on how the U.S. shapes it future waterborne commerce.

MG Don T. Riley

International Relations. Our leadership in international PIANC events plays an important diplomatic role for the U.S. It is the U.S. Section's role to explore the cultures and values held abroad, finding commonality, and brokering the ways we can work together to strike a balance between economic development and environmental sustainability. These interactions are cardinal towards countries prospering together, while

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respecting the global environment through protection and conservation measures when developing and maintaining navigation projects. The resolutions made at international PIANC forums are often adopted through law and policy by our government.

An especially important way PIANC fosters international prosperity and peace is through the assistance our developed member countries provide to those in transition. Trade that developed nations have with those in transition can have a major impact on their natural resources and people. Here, the goal is fostering development and improvement of transitioning countries' navigation infrastructure in a sustainable manner, resulting in preservation of significant and unique natural resources globally.

Inter-organizational Relations. Worldwide, PIANC has sought and secured a number of working relationships with other professional organizations, which have common interests in the water resources field. The result is sharing of project management and planning expertise, technology transfer for advanced analysis and design, and support of research and development on the frontier of our next challenges.

An important inter-organizational relationship the U.S. Section has bridged at home is with the Coasts, Oceans, Ports, and Rivers Institute (COPRI) of the American Society of Civil Engineers (ASCE). Together, these organizations have put together the COPRI Solutions to Coastal Disasters Conference, being held May 8-11, 2005, and a PIANC Technical Seminar, to be hosted May 12, 2005. Both events will be conducted in Charleston, South Carolina in conjunction with the PIANC Annual General Assembly.

Among an exciting schedule, the COPRI conference will have special sessions on the South Asia Tsunami and the Hurricanes of 2004 Charley, Frances, Ivan, and Jeanne. At the PIANC seminar attendees can hear Keynote Speaker Mr. Aleman Zubieta, Administrator of the Panama Canal, talk about Port Development in the Americas. Also, Mr. Thomas Wakeman, of the Port Authority of New York and New Jersey, will discuss his experience in rebuilding the Port of Umm Qasr, Iraq's main port. This will be followed by an afternoon of technical papers on U.S. navigation issues.

Please join us at these important water resources events to build relationships of your own among the membership of these organizations. We look forward to seeing you there!

Sincerely,

Major General Don T. Riley
President, U.S. Section, and Director of Civil Works, U.S. Army Corps of Engineers

Izzo to Chair Wetlands and Sediment Management Committee – Call for Members *by Kelly Barnes*

At its last meeting, the Governing Board of ASCE's Coasts, Oceans, Ports, and Rivers Institute approved a recommendation to establish a Wetlands and Sediment Management Committee to replace the Wetlands and River Restoration Committee. The purpose of the Committee will be to study and disseminate information on techniques for wetland restoration, creation, protection, and management, as well as for managing sediments in or removed from coastal or inland projects. Techniques will consider potential environmental impacts and economics. "Sediment management" includes managing sediments on a technically sound regional basis and considering sediments from projects as a resource that can be put to a productive and beneficial use. The committee interacts with engineers, scientists, and other professionals involved in the practice, research, policy, regulatory, legal, and educational aspects of the planning, design, construction, maintenance and operations of wetland projects and other projects (such as dredging) that require management of the sediments.

Dominic Izzo, of DMJM+Harris, will serve as the Committee Chairman. Dom is well known nationally for his tenure as Principal Deputy Assistant Secretary of the Army from 2001-2002 and presently is responsible for the Marine Business Line of DMJM+HARRIS on the Gulf Coast. In this position he is the principal-in-charge for the design of the restoration of Whiskey Island on the Louisiana coast, a project that will involve dredging material offshore to restore a barrier island to help protect Louisiana's disappearing wetlands. He was also instrumental in organizing the America's WETLAND Technical Summit in New Orleans in October 2003. This ASCE-sponsored event brought together experts from all over the country and internationally to highlight the technical challenges and opportunities for restoring the Louisiana coast. Technical Summit members concluded that "The challenges faced in dealing with coastal restoration will require the talents of economists, political scientists, geographers, biologists, ecologists, and a number of other disciplines . . . Engineers and scientists need to be equal team partners in the development of the program." This conclusion will have direct applicability to this new Committee.

In his article, "Reengineering the Mississippi," which appeared in the July, 2005 issue of ***Civil Engineering*** magazine, Dom noted that "Engineers will have to integrate the life sciences into their project planning to create a working ecosystem as they modify the river's hydraulics and many of the structural features that protect it. The mission is to preserve the economic *and environmental* engine that is the Mississippi basin; but returning the basin to wilderness is not an option. Instead, the infrastructure must be re-engineered to simultaneously accomplish multiple goals: maintain navigation and flood control, and restore the ecosystem of the river and its delta."

"I am delighted that ASCE through COPRI is positioning itself to take a stronger role in regional sediment management, beneficial use of dredged material and the integration of wetland restoration and preservation into engineering practice," stated Izzo. "I believe that this committee, working with others, can lead this effort and make a real difference in generating cooperative conservation. I am looking for energetic people, engineers and non-engineers, to join the Committee. If you are interested, please contact me at *dominic.izzo@dmjmharris.com*."

U.S. Port Trends *by Shana Heisey and Ian Mathis*

Commerce in the United States is dependent on its coastal and inland ports. Every year almost 95% of American overseas trade moves on ships. In 2003, the most recent data year available, total

Figure 1. Top 25 U.S. Ports Ranked by Tonnage

waterborne commerce in the nation reached almost 2.4 billion tons. According to the National Dredging Needs Study (NDNS), updated by the Corps of Engineers in May 2003, overall seaborne trade through the U.S. is expected to grow at a rate of 2% annually through 2020, with import growth by 6 percent.[1] To handle this trade, there are over 150 ports in the United Sates, 52 each carried more than 10 million tons of combined foreign and domestic cargo in 2003. Figure 1 shows the Nation's top 25 ports in terms of tonnage moved, which added together counted for 70% of all 2003 tonnage.[2]

The largest of these, The Port of South Louisiana, carried almost 200 million tons alone, and ranks as the world's forth-largest tonnage port. Approximately 15% of U.S. exports by tons are moved through this port, primarily traveling to Japan, Mexico, China, and Egypt. Major foreign trade commodities moved include maize, soybeans, and wheat as exports and crude oil, chemicals, and steel products as imports.[3] Many of the other significant U.S. ports ranked by tonnage are also largely bulk ports, such as Houston (ranked second), which mainly imports and exports petroleum and petroleum products, and Beaumont (4th), which moves forest products and grains.

When analyzed based on cargo value, U.S. port rankings fall very differently. Figure 2 displays the 25 ports moving the most cargo value in 2003, many of which are container ports. This small grouping of ports carried almost 87% of all U.S. trade by value.[4] Cargo moving through The Port of Los Angeles exceeded $120 billion, more than any other American port and over 15% of the national total. The primary source of this came from container traffic that reached 6.7 million twenty-foot equivalent units (TEU), ranking it the world's eighth largest container port. Trading largely with China, Japan and Taiwan, Los Angeles' imported containers contained mostly furniture, apparel, and electronics; exports contained wastepaper, synthetic resins, and fabric.[5]

Figure 2. Top 25 U.S. Ports Ranked by Cargo Value

Atlantic Coast. Over 56% of the commodities moving through[6] this region in 2003 fell into the

[1] "National Dredging Needs Study of U.S. Ports and Harbors: Update 2000," U.S. Army Corps of Engineers Institute for Water Resources, IWR Report 00-R-04, 2003, p. ES-1.
[2] Data from Waterborne Commerce Statistics Center, maps created by Eugene Olig, Sytex Corporation.
[3] *www.portsl.com*
[4] Marad, *http://www.marad.dot.gov/MARAD_statistics/usft-pts-val-97-03.pdf*.
[5] *http://www.portoflosangeles.org/factsfigures_Portataglance.htm*
[6] Regional tonnage values come from USACE Waterborne Commerce Statistics Center and represent all tons that

category of petroleum and petroleum products, 13% into non-fuel crude materials and 7% coal. As shown in Figure 3, the region's total of 507 million tons represents a 1% decline from 2002, and 5% fall from 2001 totals. Most cargo is handled in the northern east coast ports of New York, Philadelphia, Norfolk (Hampton Roads) and Baltimore. The NDNS projects annual growth of 3.5% in total vessel calls through 2020, with the fastest growing ship type being containers, which will increase at a rate of 4 percent.[7] In order to accommodate this increased traffic, several ports along the coast are exploring means of increasing their capacity. New York and Miami hope to enlarge terminals; Charleston and Savannah are considering converting break bulk terminals to accommodate containers; and Norfolk and South Carolina are considering the potential of developing new terminals. With these improvements, research suggests the region will have sufficient terminal capacity to service long-term future demands.[8] While capacity may not be an issue, the capability to handle future vessel calls may be a limitation, as only Norfolk and Halifax are currently able handle second-generation post

Panamax vessels and the NDNS estimates of the largest number of vessel calls constrained by channel dimensions are found at Atlantic coast ports.[9] Planned dredging projects throughout the region should, however, enable most of the remaining ports to handle movements by larger vessels in the future.

Great Lakes. The smallest of the four regions, the Great Lakes moved almost 230 million tons in 2003, a relatively stable amount over the last three years. Nearly 50% of this trade was non-fuel crude materials, with petroleum and coal being other significant commodities. Given the geography, it is not surprising that this region trades largely with Canada; historically over 90% of exports from the region were destined for Canada and 84% of the imports originated there. The cargo is carried primarily on bulk ships, a trend that is not expected to change by 2020 over the next twenty years.[10]

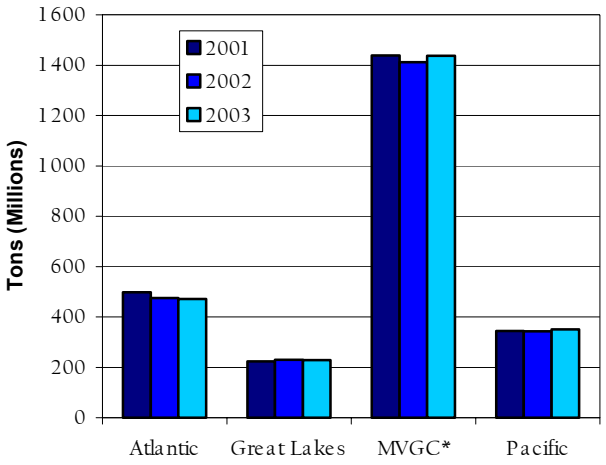

Figure 3. Regional Tonnage 2001-2003

Figure 4. Kasteelborg Unloading in Duluth.
Photo credit: Kent Rengo, http://www.boatnerd.com/

Mississippi Valley & Gulf Coast (MVGC). Moving more tons than all other regions combined, the MVGC is a vital part of U.S. trade. More than 1.4 million tons of cargo moved through this region in 2003, an amount almost unchanged from 2001 levels. As with many of the other regions, trade in petroleum and petroleum products was a substantial 47% of tonnage moved in 2003, followed by coal (14%) and farm and farm products (13%).

originate or are destined for the region as well as tons that pass through the region.

[7] NDNS, p. 108.

[8] "Long-Term Development Trends of U.S. Ports," A. Ashar, presented at Marine Transportation System Research and Technology Coordination Conference, November 16-17, 2004, pp. 2-3.

[9] NDNS, p. ES-3.

[10] NDNS, pp. 51-52, 110.

Figure 5. Wal-Mart Distribution Center, Yakima.
Photo credit: *http://www.djc.com/news/re/11151820.html*

Over the next 10-20 years, containerization will increase throughout the Gulf Coast. This region's share of total cargo arriving in containers should increase at a rate greater than that of either the Atlantic or Pacific Coasts. Gulf Coast ports have seen an increase in their total volume of U.S-China trade between 2000 and 2003. The Port of Houston is the most noticeable recipient of Gulf Coast China trade, receiving over 80% of the region's containerized traffic from that nation. A Wal-Mart distribution center planned to open in the Houston area in 2005 is expected to bring an additional one quarter to one half million TEUs to the port annually.[11]

Pacific Coast. Approximately 350 million tons moved through the Pacific Coast in 2003, an increase of 2% over the previous year. For this region, the most significant cargo moved petroleum and petroleum products, which made up 42% of 2003 tons. Manufactured goods, food and farm products and non-fuel crude materials combined make up another 40% of the trade. The most active trading partners to this region are Asian; over 80% of Chinese maritime imports and 50% of exports travel through Pacific Coast ports.[12] The NDNS predicts volumes of apparel, refrigerated produce, organic chemicals, wood, and motor vehicle parts to all continue to grow over the next 20 years, which should result in containerships accounting for over half of all vessel calls.[13]

Figure 6. Alameda Corridor.
Photo credit: *http://www.leightonconsulting.com/servprov3.htm*

The geography of this region led to the development of three distinct port development areas, the largest being San Pedro Bay, home of the Ports of Long Beach and Los Angeles. The Pacific Northwest ranks second largest, moving traffic through Seattle, Tacoma, and Vancouver, followed by San Francisco Bay. Most regional ports are capable of handling second generation post Panamax vessels, however landside transportation, particularly in Southern California, may be a major impediment to long-term growth. Opened in April 2002, the Alameda Corridor links the Ports of Los Angeles and Long Beach to downtown rail yards, separating freight trains from street traffic and passenger trains.[14] The estimated daily throughput of the Corridor is 150 trains, but congested roadways are still a problem as trucks are used to move cargo to off-dock distributions centers and yards, as well as inland distribution centers.[15]

One potential future trend for West Coast traffic is a diversion of trade to the Pacific Northwest ports. Approximately 600-750 nautical miles closer to parts of Asia than the Southern California ports

[11] "Shifting U.S.-China Maritime Logistical Patterns: The Potential Impacts on U.S. Gulf Coast Ports," Michael Bomba, presented at Marine Transportation System Research and Technology Coordination Conference, November 16-17, 2004, p. 10.

[12] "Shifting U.S.-China Maritime Logistical Patterns: The Potential Impacts on U.S. Gulf Coast Ports," pp. 9-11.
[13] National Dredging Needs Study, p. 51.
[14] http://www.acta.org/projects_completed_alameda_factsheet.htm
[15] " Long-Term Development Trends of U.S. Ports," pp. 6-7.

and equidistant to the American Midwest and Northeast by rail, the Pacific Northwest could potentially move cargo inland more quickly than the Pacific Southwest. As the total throughput of the these ports is relatively small compared to others in the region and non-local traffic already exceeds 70%, the viability of this would depend upon land reserves, technological improvements in stacking heights, and reduction or minimization of dwell times.

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Preliminary Identification of Technical Assistance Needs for Latin American and Caribbean Ports *by Bruce Lambert*

Last fall, the American Association of Port Authorities (AAPA), the Corps of Engineers, and the U.S. Section of the International Navigation Association (PIANC), developed a survey to identify technical, engineering, financial and institutional needs of Latin American and Caribbean ports. The survey's goal was to identify current and/or future assistance that the organizations could provide to these ports. The Corps of Engineers' Institute of Water Resources initially developed a phone-based interview, but given time and resource constraints, the survey was converted into a web-based survey. After translating the survey into Spanish, both English and Spanish versions were posted on Survey Monkey between November 12th and December 15, 2004.[16]

AAPA sent out multiple emails announcing the survey to 48 members of both its Latin American and Caribbean delegations. Fifteen members responded (31% response rate) but only thirteen surveys were valid (a 27% response rate). For specific questions, the actual response rate maybe lower.[17]

The survey was sent to senior management at the various ports. Nine of the fifteen respondents were either the Executive Director or Deputy Director. The remaining respondents identified themselves in Engineering (three), Sales/Marketing (two) or planning (one). The respondents thus reflect senior management's assessments of its needs, not that of the office director or lower level personnel. The identities of the survey respondents will remain confidential.

Findings. The survey questions were broken into four separate groupings: Landside Infrastructure and Operations, Waterway System and Marine Engineering, Fiscal and Financial Management, and Institutional. These four groups were selected to provide a general understanding of various topics where specific needs and assistance that may be identified. The first question asked respondents to rank these four topics from highest to lowest factors for developing new facilities. The results varied, with four respondents ranking environmental concerns the highest followed by three votes for financial considerations. By using a weighed average the rankings are: financing/budget constraints, environmental, followed closely by land and equipment acquisition.

Landside Infrastructure and Operations. Most ports replied that they had sufficient land (nine) and equipment (seven) to meet current landside needs. In the future (identified as five to ten years) five respondents felt they lacked sufficient landside capacity. Three indicated they had sufficient landside capacity. Only two respondents indicated they had sufficient equipment for future needs, while six indicated they did not.

[16] AAPA suggested Survey Monkey based on its use in previous AAPA surveys. Survey Monkey is a fee based web survey company (*http://www.surveymonkey.com*).

[17] Two respondents answered the English version while thirteen answered the Spanish version.

Waterway System and Marine Engineering. Most respondents identified channel depth as both a current and future problem. Two also mentioned handling contaminated sediments as the largest single environmental issue related to improving waterway channels. Regarding their knowledge of the current state of the art regarding aids to navigation, the group was generally neutral between channel markings, vessel tracking systems, and charting and surveying. The responders ranked channel design and maintenance and dredging and dredge material management as the two most critical issues for additional information. (AAPA hosted a conference on Latin American and Caribbean ports earlier this year, which included a joint AAPA-PIANC Workshop on Innovative Dredging Technology.)

Fiscal and Financial Management. When asked who ultimately decides infrastructure development, most responded the decision was based on either the executive director or the port board of directors. Two ports indicated they were privatized. Most ports relied on master plans to identify potential projects and to secure additional funding. Most respondents identified port charges, such as wharfage, dockage, and pilotage, as the major source for both generating revenues and financing port operations and infrastructure improvements. A few ports used other revenue activities, such as taxes or other commercial activities within the port area, to generate capital for port operations. Most indicated they were not aware of any international assistance provided for infrastructure improvement. One respondent indicated that dredging was paid for by the National government according to law.

Institutional. The results varied when the survey asked how the respondents stayed informed of new technologies and information. The survey suggests most ports rely upon email, training and conferences, and professional journals for their technical information. The respondents also cooperated with other ports, primarily through information exchanges, but also through training courses, professional associations, and regional trade forums. Only two of the ports indicated some affiliations with a university, trade association, or other organizations to manage and maintain the port.

Potential Areas for PIANC Member Support. Regarding traditional landside programs and projects, most ports relied upon contractor support for planning functions (seven). Engineering services were equally split between in-house staff and contractor support. Fewer ports felt they had sufficient in-house support for planning and engineering harbor channels and relied upon consultant services.

When asked to rank additional training or assistance for landside operations, seven identified vessel loading as the most important, followed by planning and environmental concerns (four each). Regarding waterside assistance, channel design and maintenance and dredging ranked the highest among the listed choices. The respondents also identified customs and security operations as another potential area for training or assistance.

Comparison to U.S. Ports. The survey indicates Latin American and Caribbean ports mirror the needs of their U.S. counterparts, which are also facing capital investment needs. Ports in both regions rely on consulting services in different degrees, use port master plans as the major document to secure infrastructure investment, and recognize future that capacity pressures exist. Two major differences appear to be the greater focus on environmental pressures in the U.S. and the ability of U.S. ports to more readily use different funding mechanisms for capital investment.[18]

[18] Marad publishes "U.S. Public Port Development Expenditure Report", a survey of U.S. port expenditures trends related to capital spending programs. The latest version, for FY 2002, is available at http://www.marad.dot.gov/Publications/.

Survey Caveat. The small sample and response rate raises questions about generalizing these findings as being representative of the entire region. Given the response rate, future surveyors of Latin American and Caribbean port executives may consider other survey formats or approaches.

Conclusion. While the survey size was fairly small, the survey yielded some useful information. One, the surveyed ports generally possess sufficient capacity to meet current demands, but not anticipated future demands. Two, these ports rely upon contracting support for a wide variety of topics, especially for harbor channel planning. Three, these ports rely upon many different means (networking and informal exchanges) for gathering information on current activities and services. Four, the survey identified several areas for potential assistance: dredging, planning/engineering assistance, and information on vessel loading. These initial efforts (this survey and the AAPA-PIANC session on dredging) suggest further cooperative work with Latin American and Caribbean ports may prove beneficial for all parties.

If interested in the survey, please contact Bruce Lambert, a Senior Economist, at the U.S. Army Corps of Engineers' Institute of Water Resources, 7701 Telegraph Road, Alexandria, Virginia, 22315-3868. He can also be reached by phone at (703) 428-6667 or via email at bruce.lambert@usace.army.mil.

Port Fourchon – America's Energy Corridor *by Addie Callais*

Few people recognize that as expansive as Coastal Louisiana is, there are only two corridors that provide road access to the Gulf of Mexico - one being the Lafourche Corridor and the other being in extreme South Western Louisiana in the Cameron-Holly Beach area. This limited highway connectivity to the Gulf and proximity to this nation's major offshore oil and gas fields has resulted in unprecedented development of Port Fourchon into the premiere intermodal base for support of an increasingly significant amount of this nation's hydrocarbon supply.

View to the northeast of Port Fourchon

Located on the Gulf, Port Fourchon serves as the land base for support of the Louisiana Offshore Oil Port (LOOP), which handles 13% of this nation's foreign oil, and serves as the intermodal base for support of 75% of the Gulf's domestic deepwater oil and gas production.

When combining Port Fourchon's role in supporting LOOP and foreign oil with its role as a domestic energy support base, this key energy hub is a vital component of 16-18% of our entire nation's oil and gas supply.

In 1995, technological advances in exploration and production and the passage of the Deepwater Royalty Relief Act (DWRRA) by Congress resulted in the unleashing of a new frontier in waters greater than 1000 feet deep in the Gulf. This phenomenon has enabled this nation to identify and begin producing what is now proven to be the largest domestic oil and gas find ever, with reserves estimated at 71 billion barrels. These huge reserves have sparked an unprecedented surge in Federal leasing and lease holder activity. As the industry geared up to harvest these federal resources, it became evident that there was no better place geographically, economically, or environmentally to support this swell of activity than Port Fourchon, Louisiana's southernmost port.

Port Fourchon looking south down Bayou Lafourche to the Gulf of Mexico.

Since the passage of DWRRA, the port has more than tripled in size and activity. Now, Port Fourchon has over 600 acres in operation and another 700 acres in development. Over 150 companies operate out of the port, and intermodal tonnage now exceeds 15 million tons. Over 1000 trucks a day bring cargo in and out of this key support facility.

This surge in activity has initiated the evolution of Port Fourchon into the premiere energy intermodal support facility in the Gulf. State of the art deepwater shore base support capabilities that are not present anywhere else in the world exists at Port Fourchon. These capabilities, which allow industry to efficiently support deepwater activity, have played a key role in the success of this nation's domestic production, which positively impacts the national balance of trade and helps provide energy security.

The Gulf of Mexico now provides this country with 27% of its domestic oil supply. In just the few years since deepwater production began, it has surpassed the Shelf in production. Since 1995, deepwater oil production has experienced a 500% increase and gas a 550% increase.

In just the federal leases granted for the next 5 years, the U.S. Minerals Management Service projects that there will be 10 to 21 billion barrels of oil and 40 to 60 trillion cubic feet of natural gas discovered. That is enough energy to fuel every commercial and private vehicle in America for two to five years and heat, cool and run appliances in every home in America for two to three years. In order to meet these energy milestones, key energy infrastructure will have to be sustained and even upgraded.

The "weakest link" in Port Fourchon's ability to fulfill the demands placed upon it is Louisiana Highway One (LA 1), Fourchon's only connection to land. This 17-mile stretch of barely-above-sea-level, two-lane roadway runs through the most rapidly deteriorating estuary system in the world. It provides the only means of land access to Port Fourchon and Grand Isle, Louisiana's only inhabited barrier island; it is the lifeline for support of 16-18% of the nation's total oil and gas supply; it transports a quarter of Louisiana's seafood production; and it is the only means of hurricane evacuation for 7,500 oilfield workers and several thousand residents. LA 1's vulnerability to destruction is increasing daily as wetlands erode, and studies have proven that a substantial part of LA 1 could be below sea level within 8 years. In addition, LA 1 will continue to deteriorate under heavy truck traffic to Port Fourchon unless new construction and upgrades are quickly implemented.

Port Fouchon looking west.

Efforts are underway to build an elevated four-lane highway in southeast Louisiana from Golden Meadow to Port Fourchon. Environmental clearances have been obtained, and engineering is underway. This deteriorating highway system, being further exacerbated by heavy oilfield trucks, has been used as the glaring example of the huge

inequity that exists in offshore revenue sharing between the federal government and the states supporting offshore development. Currently, the Federal Government shares 50% of its onshore mineral revenues with the state within which the production occurs. Without a similar mechanism in place to share offshore revenues with the adjacent states, the ability of key coastal energy infrastructure to sustain the level of support activity being demanded of it is threatened. In 2001, the federal government collected over $5 Billion in oil and gas revenues from offshore Louisiana and shared less than one-half of one-percent with Louisiana.

Not only is Port Fourchon currently playing a key role in supplying this nation with energy, but also it figures prominently into this nation's future energy security with the advent of ultra deepwater drilling and Floating Production, Storage, and Offloading (FPSO) usage. In the future, the port will also be an integral part of other major national energy initiatives such as imported Liquefied Natural Gas (LNG) and deep drilling in shallow waters of the Federal Outer Continental Shelf (OCS).

It is obvious that Port Fourchon and LA 1 play a critical role in supplying this nation with a substantial share of its total energy needs. They have been acknowledged as "vital" by The Department of Interior, Minerals Management Service, and LA 1 has been designated by Congress as one of only 44 High Priority Corridors in the nation, now being called "America's Energy Corridor." It is projected that Port Fourchon will continue to play an increasingly significant role in supplying the fuel that runs this country for decades into the future. At the same time, it is very clear that the demands placed upon this coastal port strain the existing highway infrastructure, and Mother Nature further exacerbates the problem with rising waters and disappearing wetlands. There is much at stake for this entire nation should Coastal Louisiana succumb to the forces of nature. If we are to meet the challenges that lie ahead in providing an adequate level of national energy security and ensure our ability to fuel this country for generations to come, this nation will have to develop a process by which states adjacent to offshore production can sustain and upgrade critical energy infrastructure.

New U.S. Section PIANC Executive Vice-President Moderates AAPA/PIANC Dredging Technology Workshop *by Ronald Conner*

At the October 2004, U.S. Section Annual Meeting, Commissioners approved creation of an Executive Vice President and U.S. Section Commissioner position for the Deputy Director of Civil Works of the Corps of Engineers. In this capacity, Mr. Fred Caver, HQUSACE Project Management Chief, served as moderator for the AAPA/PIANC Dredging Technology Workshop at the AAPA Executive Management Conference for Latin America and the Caribbean, February 3 in Miami, Florida.

Mr. Fred Caver addressing workshop attendees

The AAPA/PIANC Dredging Technology Workshop was first in a series of partnership workshops designed to share advances in research, practice and applied technologies between AAPA and PIANC members. The current focus of these workshops will be Latin American and Caribbean Port Executives who might not otherwise have the

opportunity to share advances in port research and practice. The workshops are conducted with simultaneous English-Spanish interpretation.

A distinguished group of researchers and practitioners participated in the session. Frank Hammons, Deputy Director for Harbor Development at the Maryland Port Administration spoke about Advances in the Design of Containment Areas and highlighted public participation programs of the Port of Baltimore. James Clausner, Associate Technical Director for Navigation at the USACE Engineer Research and Development Center (ERDC), talked about "Current Dredging Research at ERDC". Joe Bryant, Vice President, Terminal Development at the South Carolina State Port Authority presented on innovative techniques used for "Non-Dredging Dispersal of Material at the Port of Charleston". Finally, Tom Chase, Director of Environmental Services at Moffatt & Nichol spoke on "Dredging Project Design and Execution".

The U.S. Section wishes to thank all the speakers for their willingness to participate, as well as Dave Sanford, AAPA, who greatly assisted in planning and coordinating the event. Workshop presentations are available on the AAPA website at *http://www.aapa-ports.org/programs/05latcar_exec_man.htm*.

ICOMIA and PIANC Sign MOU *by Rich Dornhelm*

The Secretary Generals of International Council of Marine Industry Associations (ICOMIA) and PIANC signed a MOU on behalf of their respective associations in a ceremony at the Brussels Headquarters of PIANC, on February 4, 2005. The MOU recognizes the close cooperation and common interests of the associations, specifically between the ICOMIA Marinas Committee and PIANC's Recreational Navigation Commission. Future cooperation will concentrate on three areas. Firstly, the elaboration of technical and practical expertise by mutual representation in certain of each other's marina related commissions/committees and their associated work. Secondly sharing information such as project results, future work projects and meetings, as well as providing at suitable events possibilities for the other Association to promote itself and its products. Thirdly, the sharing and coordination of activities on international marina related issues. The Chairman of ICOMIA's Marinas Committee and the Chairman of PIANC's Recreational Navigation Commission (RecCom) are charged with the implementation of this Agreement.

Messrs. Rice (left) and Van Schel (right) brokering MOU

ICOMIA Secretary General, Tony Rice said, "I very much welcome this MOU which formalizes the close cooperation that has existed between ICOMIA's Marinas Committee and PIANC's Recreational Navigation Commission for many years. It will further ensure close coordination of the activities of these two groups to the benefit of the consumer and industry".

PIANC President Mr. Eric Van den Eede said, "The cooperation between ICOMIA and PIANC has increased the quality of the expertise in both organizations very much. Joint publications were "best sellers" in the recreational navigation worlds."

2005 International Marine Conference *by Ron Stone*

The largest gathering of marina professionals ever assembled in the world took place in San Diego at the ICOMIA Marina Conference, from January 9-12, 2005. Known in the industry by its acronym, IMC 2005, this international marina education conference is organized triennially by the ICOMIA Marinas Committee (IMC).

The San Diego Marriott Hotel and Marina, overlooking San Diego Bay provided the perfect backdrop and ideal boarding point for the marina field trip that is part of the event.

Playing host to IMC 2005 was the new Association of Marina Industries (AMI), formed from the merger of the Marina Operators Association of America (MOAA) and the International Marina Institute (IMI). To add impetus to IMC 2005, the AMI had opted to amalgamate their annual conference – The National Marina Marine and Boatyard Conference, which they co-organize with the American Boat Builders and Repairers Association (ABBRA) – with IMC 2005. The resulting conference attracted over 500 participants from 25 countries, and was a resounding success from both IMC and AMI perspectives. AMI noted that a representational cross section of domestic industry players, comprising marina operators, marina equipment exhibitors, and state and federal government officials in the public boat access sector were present from almost two-thirds of the United States.

NMMA (National Marine Manufacturers Association) President Tom Dammrich, in his keynote address preceding the conference, acknowledged the symbiotic relationship between marinas, boatyards and recreational marine manufacturers. He said, "problems facing marinas and boatyards are fairly common around the world, it is very useful for us to be able to come together like this in ICOMIA's triennial marina education conference to discuss problem solving. We applaud the ICOMIA Marinas Committee for its efforts in organizing the 2005 conference in San Diego and for giving the recreational marine industry in the United States the opportunity to once again play host to this premier event". Previous conferences cities had included Fort Lauderdale, USA (IMC 1999) and Sydney, Australia (IMC 2002).

Over a two-day period, fifteen separate interactive panels were convened, resulting in lively, engaging discussions over a broad range of marina related topics. These were:

- ***How to be a First-Rate Marina***, with Marina Dockage's Marina of the Year Awardees from previous years as panelists, discussing what is takes to be rated a top notch marina;
- ***Retrofitting Existing and Designing New Marina***, in which the panel provided guidance on the process of building or improving marinas;
- ***Voluntary Compliance with Environmental Management*** in which best environmental management practices came to the fore;
- ***Software Solutions Revealed*** saw various vendors espousing their thinking on a myriad of software issues and helping prospective clients navigate the many choices in the market place;
- In the session ***The Key Role of Marinas in Promoting Nautical Tourism***, it became clear that the potential for nautical tourism as an economic driver can be a compelling case for governments to support marina development;
- ***A Discussion of Best Profit Centre Ideas and Solutions*** resulted in the circulation of a list of complied ideas that marina managers can take back to implement at work;
- In ***The Benefits of Marine Trade Associations***, panelists fielded questions on cooperative unity for marina businesses and

how they work with government to minimize regulatory hurdles for the industry;

- ***A Universal Public Relations Strategy for Marinas***, is a carry forward from an IMC 1002 resolution calling on industry to address the largely negative public perception of marinas. Marinas need to be perceived as inclusive, not exclusive; catering to an economically diverse customer base; eco-friendly; and benefiting society and the community in which they operate;
- ***Marinas are Good for the Economy*** dealt with the need to quantify the positive impact marinas bring to state and local economies, and the need for a universal standard usable globally to allow cross-border comparisons and exchange of economic data;
- In ***Marina Operations and Management Issues***, managers took home ideas that they could implement and put into practice immediately;
- ***Barrier Free Access to Marinas and Boating Facilities*** dealt with handicapped access and compliance with the Americans with Disabilities (ADA) Act;
- In ***The Need for National Boat Access Needs Assessment***, the global shortage of berthing and storage spaces, and ways to alleviate the problem, was discussed;
- The session on ***Boatyard & Repair Topic*** dealt with the need for clear and consistent communication between repair yard and customer to avoid misunderstandings and ensure the repair outcome is one that the customer is satisfied with;
- In ***Marinas as a Valuable Part of Commercial Port and Harbors***, the role of marinas and recreational boating in the diversity mix of port and harbor activity was discussed; and finally
- In an increasingly litigious environment, the session on ***Liability Issues for Marina Operators*** attracted numerous questions on a range of scenarios, which might attract liability for a marina operator.

On the third day, participants were brought on an all-day field trip of San Diego Bay. The weather cooperated with the organizers, resulting in an exciting and enjoyable day on the water viewing San Diego's active, vibrant and diverse harbor with over 10,000 recreational boats, numerous marinas, the Midway aircraft carrier, the floating Maritime Museum, and the Stars & Stripes America's Cup Entries. A stop was included at the prestigious San Diego Yacht Club, which had been both a defender and challenger for the America's Cup on separate occasions.

In a format started at IMC 2002, the conference closed with IMC chairman Ron Stone reflecting on the deliberations over the two days of conferencing, and summarizing the task ahead for industry by making a clarion call for action, succinctly précised in four formal resolutions, as follows:

1. A resolution urging ICOMIA to lead the way in the development of a marina economic impact model that can be used worldwide by bringing all interested parties together to collaborate on uniform terms of reference, improved data collection and comparative evaluation of study findings.

2. A resolution urging all international organizations prominently identified with dredging issues to take cognizance of the unreasonable economic burden on the world's marinas in having to dispose of contaminated dredged material where the source of contamination is outside the marina basin and unrelated to marina operations and uses.

3. A resolution urging the ICOMIA Marinas Committee to consult with marina

associations and marina insurance companies, governments and academia, about developing a universal risk management manual as guidance on coping with natural disasters, such as hurricanes, earthquakes, tsunamis, floods and forest fires.

4. A resolution expressing deepest sympathy and solidarity with tsunami victims from the 12/26 Indian Ocean earthquake affecting southern Asia, and pledging support for the relief and resurrection of the region.

In a final administrative act before drawing the conference to a close, Dan Natchez, representing the IMC 2005 Organizing Committee, passed the organizer's baton to Steven Desloovere from Belgium. They had earlier won the right to host IMC 2008 in Ostend, Belgium, with the Flemish Marina Community and the French Marinas Federation as co-sponsors.

The proceedings of IMC 2005 are available on CD-ROM format. For price and ordering visit *www.icomia.com*

Additional information on IMC 2008 in Ostend, Belgium, will be posted on the website *www.imc2008.com* nearer the date.

For more information or queries regarding this press release, contact Ron Stone, IMC Chairman, at
Tel (808) 695 1142,
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E-Mail *stone_ron@msn.com*

ICOMIA

Inland Waterways Conference 2005

by Fred Schilling

The theme for this year's Inland Waterways Conference was "Safety and Security of America's Waterways". The conference was held at the Radisson Hotel Opryland just down the road from the Grand Ole Opry in the country music capital of the world, Nashville, Tennessee.

To get the activities kicked off, a pre-conference event was held on 14 March. The National Transit Institute at Rutgers University provided a free training opportunity entitled Homeland Security Train the Trainer, System Security Awareness for Vessel Employees. The course provided the participants with the knowledge and skills to define their role and responsibilities in system security, be able to recognize suspicious activities, packages, devices, and substances, and recognize techniques used to circumvent security measures. It also taught them to observe and report relevant information and minimize harm to themselves and others. Upon completion of the training, a security tabletop drill at incident command system level 100 was held to exercise what they had learned.

The conference began on 15 March with Mr. Alan Bernstein of BB Riverboats, Mr. Robert Willis, Chief, Operations Division, Great Lakes and Ohio River Division, and LTC Byron Jorns, Commander of the Nashville District providing introductions and a warm welcome to Nashville. To set the tone for the safety and security theme, BG Bruce Berwick, Commander of the Great Lakes and Ohio River Division, RADM Robert Duncan, Commander of the Eighth Coast Guard District, Mr. Craig Philip, CEO of Ingram Barge Company, and Mr. Troy Manthey, President of the Passenger Vessel Association, provided the opening remarks.

MG Don T. Riley, USACE's Director of Civil Works, gave the keynote address entitled "The Inland Waterway Challenge: Many Demands, Few Resources" in which he gave insight to the Corps' relatively flat civil works budget and the challenges the Corps and its partners face in funding the numerous vital inland waterway projects throughout the nation with limited funding.

The second day began with presentations on river contingency plans by CDR John Bingaman, CDR Jim Michalowski, and LT Kevin Lynn with

the Coast Guard, Mr. David Schaaf with the Corps, and Mr. Scott Noble representing RIETF. This was followed by a very impressive group of seven highly experienced working Captains on the rivers providing their perspectives on the state of the river industry. Their insightful thoughts on working on the rivers and how the times have changed with regard to recruiting and retaining young people for careers on the rivers was one of the highlights of the conference.

Mr. Mike White, Chief, Operations Division at Corps' Headquarters, gave a presentation on operational reliability on the inland waterways system and how the Corps and its inland waterway partners will be looking at the risk and reliability issues associated with our projects especially during these times of limited resources. Mr. John Paul Woodley, Jr., Assistant Secretary of the Army for Civil Works, gave his insights on his role and expectations with regard to the Corps, the Army, Congress, the Administration, and the inland waterways community.

The Coast Guard and Corps gave talks on new technologies that included automated information systems, electronic charts, smart locks, and an innovative lock gate removal procedure using a gantry crane. After reports from the Inland Waterway Users Board, REITF, and AWO, several presentations were given on emergency closures at McAlpine, Mel Price, and L&D 27 Locks during 2004 that highlighted the critical maintenance backlog needs for our waterway infrastructure.

On the final day the group was given mini-presentations on bridges, western rivers licensing, passenger vessel safety, and maritime security by the Coast Guard. The Coast Guard also led discussions on safety and security inspections on un-inspected towing vessels to include verification exams, compliance issues and tracking of dangerous cargoes, and new towing vessel inspection program development all of which were of particular interest to the audience.

The conference was closed out by a riveting slide show by Mr. Michael Ensch from the Nashville District who volunteered to serve in Iraq and gave a personal account of the Corps' mission there.

In addition to the formality, the participants were rewarded with a wonderful cruise and awards ceremony aboard the GENERAL JACKSON on the first night hosted by the Propeller Club of the Port of Nashville. In addition, the Deep Water Boys, a local band made up of talented team members from the Nashville District, entertained the group the second night.

A Salute to King Fisher *by Ray Butler*

King Fisher

King Fisher is a self-made man, crediting his good fortune to nothing more complicated than hard work… and LOTS of it. He is a member of the Gulf Intracoastal Canal Association (GICA) board of directors, and has been for many years. He is known far and wide as an expert on the Gulf Intracoastal Waterway, and has worked tirelessly throughout his lifetime as one of its strongest proponents.

The Gulf Intracoastal Canal Association is proud to dedicate its 98th Annual Convention to King Fisher.

King Fisher was born in Port Lavaca, Texas on January 14, 1916. He is the fourth son of C.E. and Kittie Fisher.

King grew up in Port Lavaca, and made it his home. Like many young boys, when he wasn't in

his Sunday clothes, he was dressed for action as a Boy Scout or geared for a hunt with his B-B gun.

Being raised in the family's fish and shrimp business, King was naturally drawn to the water. From the time he was old enough to hold the wheel, he was navigating boats for his father along the Gulf Coast.

King's sense of innovation is one he cultivated from his parents. In the early 1920s, for example, his father's seafood business shipped the first railcar of fish and shrimp to the west coast.

King worked part time at the Magnolia filling station while continuing to work long hours at his father's seafood business. He attended Port Lavaca High School, which was the extent of his formal education.

King and high school buddy Milton Peck built a working Model "T" automobile from parts they salvaged from the junkyard. This served as the boys' only mode of transportation for several years. King graduated to a used Chevrolet in 1935, and moved on to building even bigger things.

King married his wife Jewel on April 13, 1937. It was a Friday, but luck was obviously running in their favor. By this time, King was shrimping and doing geophysical work with two of his own boats.

King opened his machine shop in 1940. While days were spent doing seismographic work for oil companies, nights were spent working here. Not forgetting the treasures one might find in the junkyard, King successfully built his first towboat, the C.E. Fisher, from a repossessed hull and an old Buick engine.

Years later, he built his first dredge – again, entirely by hand. This is the ingenuity that would ultimately build a multi-million-dollar company.

The "Tyro," King's his first dredge, was completed in 1952. It became known as the most powerful and dependable 12-inch dredge on the coast. It is a prime example of King's ability to recycle old materials and put them to good use. Tyro served the company well for many years.

A new office was built in 1960. Just as it was starting to feel like home, Hurricane Carla paid a visit. The building survived, but the company suffered a great deal of loss. Time proved, however, that even Carla could not deter King Fisher. By 1965, business was better than ever. The company had two 18-inch dredges and several smaller ones. King Fisher Marine Service was operating not only in Texas, but also in all states touching the Gulf of Mexico.

Under his leadership, King Fisher Marine Service dredged in almost every section of the Gulf Intracoastal Waterway, from Brownsville, Texas to St. Marks, Florida. It performed the original dredging for the Alcoa plant in Point Comfort, was a major contractor for original construction of the Victoria Barge Canal, and competed regularly – and successfully – against larger, out-of-state companies for dredge work on the Houston Ship Channel. After 58 years in business, King sold the company in 1998. It continues to be the primary contractor for maintenance of the Gulf Intracoastal Waterway, and remains the largest marine contracting company of its type in Texas.

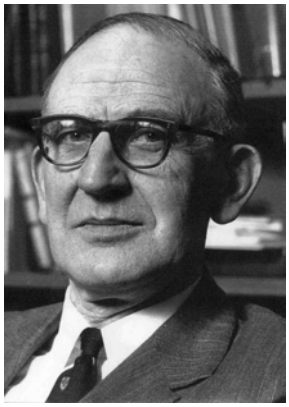
King has been inducted into the Pipeliner's Hall of Fame, is listed in Who's Who in the Southwest, is a lifetime member of the Gulf Intracoastal Canal Association, and has been inducted into the National Rivers Hall of Fame.

Thank you, King, for inspiring us to reach for our dreams… for keeping the American pioneer spirit alive… and for helping us tell the story of the Gulf Intracoastal Waterway.

Ray Butler is Executive Director of the Gulf Intracoastal Canal Association, Email *rbutler@houston.rr.com*.

In Memoriam of Sir William Harris

by Vald Heiberg



Sir William Harris

Sir William Harris, KBE, CB, of the U.K., died peacefully at his home February 20th of this year in England. During the 1970's and 1980's, Sir William worked diligently with his PIANC colleagues to modernize the international operation. His primary partner in that effort was Lieutenant General Jack Morris, the 44th Army Chief of Engineers. With their U.S., U.K., and Dutch partners, they convinced the PIANC organization to become a far more relevant international professional organization. Sir William became one of the first "International Vice Presidents" of PIANC after heading the U.K. Section, and was also deeply engaged with a range of engineering matters within the U.K. Many of the more senior US PIANC "veterans" will remember "Bill" Harris and the successful effort he led to modernize PIANC.

Sir William survived his first wife, Margaret Harris, about 15 years ago. He then married Rachel Harris, a long time friend of his and Margaret's. Bill and Rachel had (as Rachel said) "eleven wonderful years together."

Sir William Harris' remains were laid to rest near his home in East Carleton. Mrs. Rachel Harris can be contacted at: 10 Church Lane, East Carlton, Market Harborough, LE16 8YA, U.K.

PIANC Member John Headland Joins ASCE Teams in Tsunami Response *by Edmond Russo*

Three technical teams, comprised of ASCE and Institution of Civil Engineers (ICE) members, were in South Asia studying the catastrophic damage resulting from the recent earthquake and tsunami. ASCE team members are comprised of members of the Coasts, Oceans, Ports and Rivers Institute (COPRI) and the Technical Council on Lifelines Earthquake Engineering (TCLEE).

Team members John Headland and Peter Yin visit Sri Lanka

The teams are investigating the specific causes of failure in some structures and the elements that allowed some structures to survive. The teams departed for the region January 30-31, 2005 and returned by February 9, 2005. Field reports from the teams are featured on *Engineering News Record*. The teams' findings will be available to ASCE members in early spring.
ASCE's international and technical groups are working with colleagues from a number of nations to coordinate a technical response. Actions include:

- ASCE has made a library of journal articles related to response and mitigation to tsunami events available for free download to the professional community.

- ASCE, in cooperation with the Institution of Civil Engineers (ICE), is sending three technical teams to South Asia to study the catastrophic damage resulting from the recent earthquake and tsunami. The teams will investigate the specific causes of failure in some structures and the elements that

allowed some structures to survive. ASCE assessment teams have submitted field reports describing their activities.

- On January 27, 2005, ASCE attended a joint meeting of engineering societies to determine the collective response of the engineering community to this international tragedy.

For more information, visit www.asce.org.

Navigable Waterways Receive Low Grade on ASCE's Infrastructure Report Card *by Kelly Barnes*

Traffic congestion and our children's overcrowded schools are daily reminders that the state of our nation's infrastructure directly affects our economy and quality of life. The American Society of Civil Engineers (ASCE) just released its 2005 Report Card for America's Infrastructure - assigning a cumulative grade of "D" for the nation's infrastructure. The 2005 Report Card assesses the same 12 infrastructure categories as in 2001, in addition to three new categories - public parks and recreation, rail and security.

Navigable waterways received a "D-", compared to a "D+" in 2001. This was the largest grade reduction of the twelve categories previously graded. The U.S. Army Corps of Engineers maintains more than 12,000 miles (19,200 kilometers) of inland waterways, and owns or operates 257 locks at 212 sites on inland waterways. These waterways - a system of rivers, lakes and coastal bays improved for commercial and recreational transportation - carry about one-sixth of the nation's intercity freight, at a cost per ton-mile about half that of rail, or one-tenth that of trucks.

Waterways are excellent ways to move large volumes of bulk commodities over long distances at a fraction of the cost of rail or trucks. The cargo capacity of a typical barge is equivalent to that of 15 large railroad cars, or 58 semi-trucks. A representative 15-barge tow on a main stem waterway moves the same cargo as 870 trucks stretching 35 miles on the interstate highway system. That same 15-barge tow would require two

100-car unit trains, extending nearly three miles in length.

Locks and dams can affect the environment. They slow the natural velocity immediately upriver from their locations, so that organisms adapted to fast-flowing water are replaced by those adapted to slow-flowing water, and dams trap sediments that would otherwise flow farther downstream. More dredging may be necessary to keep the navigation channels open.

The 12,000 miles of inland and intracoastal waterways, as do highways, operate as a system, and much of the commerce moves on multiple segments. They serve as connecting arteries, much as neighborhood streets help people reach interstate highways. These waterways are operated by the Corps of Engineers as multi-purpose, multi-objective projects. They not only serve commercial navigation, but, in many cases, also provide hydropower, flood protection, municipal water supply, agricultural irrigation, recreation and regional development. Forty-one states, 16 state capitals and all states east of the Mississippi River are served by commercially navigable waterways. Domestic companies operating vessels on U.S. waterways increased 19.6% from 2002 to 2003.

A single barge traveling the nation's waterways can move the same amount of cargo as 58 semi-trucks at one-tenth the cost - reducing highway congestion and saving money. Of the 257 locks on the more than 12,000 miles of inland waterways operated by the U.S. Army Corps of Engineers, nearly 50% are functionally obsolete. By 2020, that number will increase to 80%. The cost to replace the present system of locks is more than $125 billion.

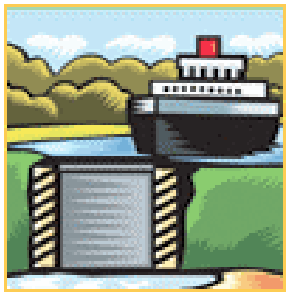
Waterway usage is increasing, but the facilities are aging; many Corps-owned or -operated locks are well past their planned design life of 50 years. Of the 257 locks still in use in the United States, 30 were built in the 19th Century, another 92 locks are more than 60 years old. In other words, nearly 50% of all Corps-maintained locks were functionally obsolete by the beginning of 2005. Assuming that no new locks are built in the next 20 years, by 2020, another 93 existing locks will be obsolete - rendering more than 8 of every 10 locks now in service archaic. As the system ages, the infrastructure cannot support the growing traffic loads, resulting in frequent delays for repairs. At the same time, the repairs become more expensive due to long-deferred maintenance.

The Inland Waterway Trust Fund, created in 1978, pays half the cost of the construction and major rehabilitation costs for specified federal inland waterways projects. It receives money from a tax on fuel (currently set at 20 cents per gallon) on vessels engaged in commercial transportation on inland waterways. In recent years, there have been a number of major inland waterway infrastructure failures - a few years ago, the entire Ohio River system was closed for a time due to infrastructure breakdowns. The fund earned $106 million in FY 2005, including approximately $91 million paid by the barge and towing industry, and $15 million in interest. The Corps of Engineers received $149 million for construction projects, leaving a balance of approximately $307 million. In FY 2006, the Corps is planning to spend $394 million on current maintenance projects, a sum that will not reduce the backlog of pending repairs that exceed $600 million. In addition, the Bush Administration proposed in February 2004, to spend $184 million from the trust fund for new construction in FY 2006. The trust fund balance remaining at the end of the year is expected to be $228 million - enough to begin addressing a significant portion of the maintenance backlog. The Corps estimates that it would cost more than $125 billion to replace the present inland waterway system.

For the first time, beaches and recreational harbors were considered but not graded separately. They were included in a new category – Public Parks and Recreation. That received an overall "C-" grade. A new category - public parks and recreation - received a "C-" grade. Many of our nation's public parks, beaches and recreational harbors are falling into a state of disrepair. Much of the initial construction was done more than 50 years ago. These facilities are anchors for tourism and economic development and often provide the public's only access to the country's cultural, historic and natural resources.

Coastal areas are vital to Americans, providing a home for 53% of the nation's population on just 17% of the land area, as well as popular vacation destinations for American and foreign tourists. In fact, coastal areas generate almost 31% of the U.S. gross domestic product. Beaches provide shore protection in these areas, and have a tremendous national economic impact. Travel and tourism is the United States' largest industry, employer and earner of foreign exchange. Spending by foreign tourists alone supports 2.7 million U.S. jobs. The popularity of beaches dominates tourism, with 75% of summer travelers planning to visit beaches. In the United States, coastal states receive about 85% of the country's tourist-related revenues, largely because of the popularity of beaches. Beach erosion and shore protection are of major concern to tourism and, for more than 60 years, the federal government has worked in concert with state and local entities to maintain and restore the nation's beaches to benefit all Americans.

An advisory council consisting of 24 civil engineers, who represented a broad spectrum of civil engineering disciplines, assessed the 2005 Report Card. U.S. Section Commissioner, Charles Calhoun, was a member of the council. Each category was evaluated on the basis of condition and performance as reported by federal sources; capacity versus need; and current and pending investment of state, local and federal funding versus need. For more information, including state infrastructure statistics and policy options, visit *www.asce.org/reportcard*.



Highlights From the PIANC Executive Commission (ExCom) *by Bob Engler*

The ExCom met February 4-5, 2005, to direct the business practices of PIANC and strategically plan for the future. Major issues under consideration and action are: Update on all active Working Groups and discussion and approval of new Working Group Terms of Reference for the various Commissions (Communications Commission – CoCom; Environmental Commission – EnviCom; Inland Waterways Commission – InCom; Maritime Commission – MarCom; and Recreation Commission – RecCom). This activity is the historic and continuing foundation of PIANC. The ExCom is formally partnering with the Commission on the Rhine River (CCNR). A current list of global and regional stakeholders expands the reach and scope of PIANC to system wide navigation/water resource activities and gains a better understanding of PIANC's water resource stakeholders. The groups include COPEDEC (Coastal and Port Engineering in Developing Countries), the European Union and its various directives, the American Association of Port Authorities, the World Bank, European Seaports Organization (ESPO), and other United Nations agencies, such as the International Maritime Organization (IMO), and United Nations Environmental Program (UNEP). The Finance Commission (FinCom) reported favorably (positive balance) on PIANC's financial status and approved the 2005 budget and the business plan for 2006-

2008. The 31st Congress in Estoril Portugal is being prepared for and an extra effort is needed to ensure the proper number of abstracts is received. A new Vice-President was selected and the position was awarded to Mr. Jain from India. The Chairman for the Cooperation Commission was selected from several candidates and was awarded to Mr. H. Ligteringen of the Netherlands. Significant discussion regarding initiatives to make much more use of the Internet was held, and a discussion group was formed to advise the ExCom at their next meeting. Tsunami issues were discussed and MarCom and InCom were charged with developing a new Working Group to address these issues. PIANC ExCom is in the process of updating the Strategic Plan and all Commissions are charged to do the same.

The U.S. presented final plans for the 2005 AGA to be held in Charleston, South Carolina, May 8-13, 2005. Plans were also discussed for the May 2006 PIANC World Congress to be held in Portugal. These and other ExCom activities will be posted at *www.pianc.aipcn.org*. Questions may be directed to Dr. Bob Engler at *robert.m.engler@erdc.usace.army.mil*, or Tel (601) 634-3624.

Highlights from the PIANC Environmental Commission (EnviCom) *by Bob Engler*

The EnviCom is responsible for dealing with both broad and very specific sustainability and environment-related issues of interest to PIANC. The EnviCom met February 5-6, 2005, in Brussels, Belgium, in conducting its business of environmental support to navigation infrastructure. The WG (Working Group) 8 – Generic Biological Assessment Guidance for Dredged Material, will be presented to the London Convention 72 (LC) Scientific Group for their use in implementing LC Dredged Material Guidelines. EnviCom reports are not only targeted on a wide diverse array of user groups, but are partnered with important stakeholders, such as the London Convention, concerned with navigation activities. Two WG's are scheduled for completion in early 2005, WG 10 – Environmental Risk Assessment in Dredging and Dredged Material Disposal, and WG 11 – Management, Reclamation of Dredged Material and End Use of Existing Confined Disposal Facilities and will also be presented to the LC. WG 12 – Sustainable Waterways within the Context of Navigation and Flood Management, WG 13 – Best Management Practices Applied to Dredging and Dredged Material Disposal for the Protection of the Environment, and WG 14 – Dredged Material Beneficial Use Options and Constraints are mid- to two-thirds completed. They are scheduled for publication in 2006. The Environmental Impacts of Arctic Navigation (WG 9) is on hold for an undetermined time period. Two new WG's dealing with Navigation and Fish Habitat, and Ballast Water Management on Board Dredges, are being planned. A new WG 15 dealing with Coral Reefs in relation to dredging and port construction has been advertised. The EnviCom will also initiate an Experts Group on the Environmental Benefits of Waterborne Transport. The EnviCom, along with other Commissions will complete a full strategic planning effort this year in looking to the future of PIANC.

EnviCom conducted a first review of strategic issues and developed the following list:

- Sediment release during dredging operations and means to influence the phenomenon, with a possibility to include other sources of re-suspension.
- How to tackle the huge escalation of dredging cost (labor, fuel, safety, security and environmental requirements).
- Determination of the effects from changes in physical environment (short and long term actual and perceived effects and not only due to dredging, but also infrastructure changes).
- Possible consequences and anticipation strategies regarding the EU Marine Strategy.

And implications EU Water Framework Directive and Habitats and Birds Directive. Contradictions between them. And consequences Environmental Liability Directive.

- Development and implementation of knowledge management, capacity building and good stewardship related to navigation infrastructure.
- Level playing field and harmonization in regulation and enforcement.
- Sense and non-sense of shore based electricity supply to vessels.
- River basin wide risk based sediment management (including the management of historic contamination).
- Sense and non-sense of environmental dredgers.
- Impacts from vessels. What can be done to mitigate impacts and who is responsible (vessel, port, fuel producer).
- How to predict the effects of climate change, medium term and long term with respect to ports and (river) navigation.
- Guidelines for environmental management on global scale (for instance clean-up goals).

These will be the basis of future discussion at the next meeting of EnviCom.

The EnviCom working with the EU and European navigation interests, continue to interact with the EU "Water Directives" and their relationship to navigation and its infrastructure.

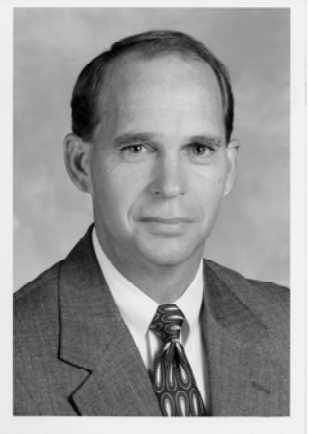
The EnviCom also represents the technical views of the PIANC member nations at important global and regional treaties and international agreements such as the London and OSPAR Conventions dealing with global and regional protection of the marine environment. The EnviCom further partners with important stakeholders such as the American Association of Port Authorities (AAPA), International Association of Ports and Harbors (IAPH), Western Dredging Association (WEDA), Central Dredging Association (CEDA), International Association of Dredging Contractors (IADC), International Commission on Large Dams (ICOLD), European Sediment Research Network (SedNet) and the Paralia Nature Project of the Institute for Infrastructure, Environment, and Innovation.

The EnviCom also welcomed three new members; Mr. A. Datta (UNEP), Mr. H. Koethe (Germany), and Mr. E. Russo (USA), while thanking M. J. Reche (Germany) on his retirement for his many years of effective service to EnviCom.

A complete listing of EnviCom activities schedules and published reports, brochures and technical briefs can be found at www.pianc.aipcn.org. The next meeting of the EnviCom will take place Sep 29-30 in Gotenborg, Sweden. The EnviCom has as its membership, 15 nations and 12 partnering groups/associations. Questions about these activities can be directed to Dr. Bob Engler, Chairman, EnviCom, at: robert.m.engler@erdc.usace.army.mil, or Tel (601) 634-3624.

Meet the Commissioners *by Anne Sudar*

PIANC Commissioner Kurt Nagle has been President of the American Association of Port Authorities (AAPA) for the last decade. Mr. Nagle joined AAPA in 1985 as Director of Membership Services and was promoted in 1987 to Vice President of Membership Services and Administration and in 1989 to Senior Vice President. He was named President in September 1995.



Kurt Nagle

Mr. Nagle travels the globe discussing issues like harbor dredging and taxes, infrastructure investments, port security, and trade regulations.

He represents the port industry's concerns on Capitol Hill, and educates the public on the role of seaports in commerce and national defense.

Commissioner Nagle has been instrumental in the U.S. Section PIANC's efforts to reach out to the Latin American navigation community. In February 2004, at the AAPA's Latin American Port Executives Conference, the U.S. Section PIANC cosponsored a Technical Seminar on Advanced Dredging Techniques.

At the Commissioners' Meeting in Charleston this May 2005, the U.S. Section PIANC will formalize their cooperation with AAPA by signing a Partnering Agreement.

Prior to joining AAPA, Mr. Nagle served as Director of International Trade for the National Coal Association and as Assistant Secretary of the Coal Exporters Association. Previously, he worked in the Office of International Economic Research at the U.S. Department of Commerce.

Mr. Nagle holds a Masters degree in Economics from George Mason University. He is nearing the end of his second four-year term as a PIANC Commissioner.

Marine Transportation Solution Eases Congestion in Western U.S. *by Edmond Russo*

Central Gulf (CG) Railway, Inc., is relocating its rail car ferry service to the Port of New Orleans, in May 2005. Rail cars loaded with coffee, beer, textiles, and auto parts, for example, would be shuttled between the new location and origins/destinations in Mexico, averting congested land borders in Texas.

Railcar loading/unloading operations at the Port of New Orleans offer an efficient transportation alternative, with the close proximity of rail yards to deep draft shipping lanes. The Port of New Orleans is the only location in the U.S. where all six major rail lines come together next to a deep draft marine transportation route.

Vessel berthing for rail car loading/unloading

CG Railway estimates that between 75 and 96 ship transits would be made per year, with 84 trips being the likely average. An average of about 20,000 rail cars would be moved per year through this service, carrying about 1.8 million tons of cargo in the process. It takes about 6 hrs to load/unload each vessel, once terminalized. Each ship has a beam of 117 ft, length of 585 ft, and a draft between 18 and 23 ft.

Rail cars being transferred between land and ferry

With a project cost of about $40 million, the Louisiana Governor's Office is partnering in the project by providing up to $15 million towards a

unique ramp facility to enable rail cars to be loaded/unloaded on the double-decked roll-on/roll-off (RORO) rail ferries. Besides the known business flow stream that would result from establishment of this facility, the project would likely lead to additional rail activity in the area in the future.

Younger Member and Student Opportunities to Excel in PIANC

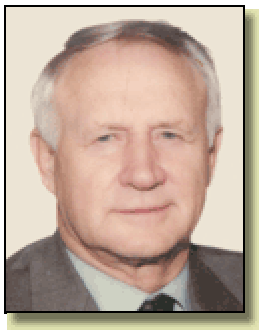
by Anne Sudar and Edmond Russo

U.S. Section Scholarship. A U.S. Section PIANC Scholarship is available to Texas A&M University students, and will soon also be available to other universities. This year's winner is Jonathan Kager, at top junior ocean engineering student. The award is $1500. The Texas A&M Scholarship Committee awards the scholarship based on the following criteria:

- The applicant will provide a curriculum vitae or resume not to exceed one page.
- The selected applicant will be a graduate student or undergraduate student of junior or senior standing with a grade point average of at least 3.0.
- The selected applicant will be in a course of study in engineering, economic, or environmental disciplines related to planning, design, construction, operations and maintenance, and management of navigation infrastructure, coastal waterways, dredging, port and terminal facilities and water transportation planning.
- The selected applicant will have demonstrated potential to make substantial contributions to a relevant field of engineering or associated discipline, and/or shows promise for further distinguished academic studies that are related to the mission of PIANC.

Call for Papers – 2006 De Paepe-Willems Award Contest. The De Paepe-Willems Award is given for the most outstanding technical paper prepared on an aspect of waterborne transport. Categories include policy, management, design, economics, integration with other transportation modes, technology, safety, public involvement, and the environment. The competition is open to anyone 35 years of age or under.

Ir. Gustave Willems
1901 - 1982



Ir. Robert De Paepe

The U.S. Section's award winner in 2006 receives a $1000 U.S. Savings Bond, an expense-paid trip to the 2006 U.S. Section Annual Meeting, and an individual membership in the U.S. Section PIANC for five years. The U.S. Section winner's paper is forwarded for international competition in 2006. The international winner in 2006 receives a trip to the 2006 Annual General Assembly, which will be held in Estoril, Portugal. The International award winner receives € 5000 and a five-year individual membership.

Abstract submittal is open for the 2006 competition. The deadline for submitting paper abstracts for the 2006 contest has been extended to ***May 1, 2005***, with technical paper submittals required by ***July 30, 2005***. For more details contact Edmond Russo, Chairman, Publications Committee, at edmond.j.russo@mvn02.usace.army.mil.

Young Professionals' Implementation Group (YPIG). The YPIG is an international group of younger members of PIANC, which are focusing on:

- Building E-communication in the navigation community;
- Representation of Young Professionals in the organization;
- Promotion of PIANC to navigation interests; and

- Knowledge transfer of navigation-based information and technologies.

Ms. Shana Heisey of IWR, USACE, and Ms. Jessica McIntyre of Moffatt and Nichol have been appointed to represent the U.S. Section in YPIG. If you are interested in taking up this position, please contact Ron Conner at *ronald.r.conner@usace.army.mil*.

Upcoming PIANC Events

by Edmond Russo

AGA 2005 in Charleston, South Carolina. The U.S. Section is hosting the 2005 Annual General Assembly of PIANC in Charleston, South Carolina. Plans are in place for the event, which is scheduled for May 9-13, 2005. The meeting will be held at the Francis Marion Hotel. The South Carolina State Port Authority has agreed to sponsor the opening reception and provide commentary during the boat tour of the harbor.

31st World Congress. The next International Congress will be held May 14-18, 2006 in the Portuguese resort city of Estoril. The deadline for submittal of abstracts has been extended to ***June 1, 2005***.

Upcoming Related Conferences

2005

- ***Conference on Coastal Conservation and Management.*** April 17-20. Algarve, Portugal.
- ***Coastlines, Structures and Breakwaters.*** April 20-22. London, U.K.
- ***Dredged Material Assessment and Management Seminar.*** April 26-28. Boston, MA.
- ***Solutions to Coastal Disasters.*** May 8-11. Charleston, SC.
- ***Offshore Technology Conference.*** May 2-5. Houston, TX.
- ***International Short Course on Modeling of Coastal Processes.*** May 12-13. Cosenza, Italy.
- **2nd International Conference on Integrated Coastal Management.** May 11-15. Santiago de Cuba, Cuba.
- **Management/Remediation Of Contaminated Sediments.** June. San Diego, CA.
- ***Second International Coastal Symposium in Iceland.*** June 5-8. Hornafjordur, Iceland.
- ***5th International Symposium on Ocean Wave Measurement and Analysis.*** (Waves '05) July 3-7. Madrid, Spain.
- ***Coastal Zone '05: Balancing on the Edge.*** July 18-21. New Orleans, Louisiana.
- ***Asian and Pacific Coasts 2005 (APAC2005).*** September 4-8. Jeju, Korea.
- ***U.S. Maritime Security Expo.*** September 20-21. New York, New York.
- ***Coasts and Ports Australasian Conference 2005.*** September 20-23. Adelaide, South Australia.
- ***Urban River Rehabilitation.*** September 21-23. Dresden, Germany.

2006

- ***30th International Conference on Coastal Engineering.*** September 3-8. San Diego, CA.

2007

- ***Ports* 2007.** March 25-28. San Diego, CA.
- ***Coastal Sediments 2007.*** May 13-17. New Orleans, LA.

About PIANC *by Anne Sudar*

What is PIANC? The International Navigation Association (PIANC) is a worldwide organization of individuals, corporations, and national governments. Founded in 1885 in Brussels, Belgium, it is concerned with maritime ports and inland waterways. The Association promotes contact and advances and disseminates information of a technical, economic, and environmental nature between people worldwide in order to efficiently manage, develop, sustain, and enhance inland, coastal and ocean waterways, ports and harbors, and their infrastructure, in a changing environment.

Where is PIANC? The international headquarters is located in Brussels, Belgium, at facilities provided by the Belgian Government. The headquarters of the United States Section is located in the Washington, D.C. area, within facilities provided by the U.S. Army Corps of Engineers.

International Interaction. The Annual General Assembly operates through a Council, which directs the working level permanent technical committees, international study commissions, and working groups.

Working Groups. Technical working groups are composed of participants from member countries who have interest in various subjects being studied. The groups gather, analyze, and consolidate state-of-the-art material from each country. The resulting reports are published and sent to each PIANC member. Working group reports and the International Bulletin are sent to each member from Brussels.

Every four years an International Congress, open to all members and other registrants, is held for the presentation and discussion of papers on subjects pertaining to waterways and maritime navigation.

PIANC also participates in technical activities with other organizations to study navigation problems and joins with them to present symposia on related subjects.

In the USA. The United States became a member of PIANC by Act of Congress in 1902. The Chairman of the U.S. Section is the Assistant Secretary of the Army (Civil Works). The Director of Civil Works for the U.S. Army Corps of Engineers serves as President. A National Commission of eleven individuals, which represent both private industry and the Federal Government, manages the Section. The U.S. Section has two standing and four technical committees, which promote the flow of information between members and facilitate cooperation with other national organizations. The committees are Membership, Publications, Environment, Inland Navigation, Maritime Navigation, and Ports and Recreation Navigation.

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